



October 18, 2019

Via ECFS

Marlene H. Dortch, Secretary
Federal Communications Commission
445 Twelfth Street, SW
Washington, DC 20554

Subject: *Revised Mean Opinion Score Testing per Order on Reconsideration
(WC Docket No. 10-90)*

Dear Ms. Dortch:

This letter provides further information to supplement the filing by Hughes Network Systems, LLC ("Hughes") withdrawing its petition for reconsideration in the above-referenced proceeding.¹ The Petition sought clarification or reconsideration of the Commission staff's Performance Metrics Order.²

In this proceeding, Hughes has previously expressed concerns that the original Mean Opinion Score ("MOS") testing framework adopted by the Bureaus might not be achievable by satellite broadband providers using geostationary satellites.³ Specifically, in prior filings, Hughes has discussed an ITU planning tool which estimates that a network with 600 ms of latency, such as a geostationary satellite network, is likely to produce a MOS of 3.72 using the conversational-opinion test.⁴

Subsequently, however, the September 12, 2019 Order on Reconsideration in this docket modified the MOS testing framework in significant ways.⁵ Hughes has clarified that, based upon its review of the revised testing requirements, "Hughes believes it can meet these requirements."⁶

¹ Hughes Network Systems, LLC, Petition for Clarification or, in the Alternative, Reconsideration, WC Docket No. 10-90 (filed Sept. 19, 2018) ("Petition"); Hughes Network Systems, LLC, Withdrawal of Petition for Clarification or, in the Alternative, Reconsideration, WC Docket No. 10-90 (filed Oct. 10, 2019) ("Withdrawal").

² *Connect America Fund*, Order, 33 FCC Rcd 6509 (WCB WTB OET 2018) ("*Performance Metrics Order*").

³ See *id.* at ¶ 15.

⁴ See, e.g., Reply of Hughes Network Systems, LLC, to Oppositions and Comments on Petitions for Reconsideration, WC Docket No. 10-90, at 4-5 (filed Nov. 19, 2018) ("Hughes Reply").

⁵ *Connect America Fund*, Order on Reconsideration, DA 19-911 (WCB WTB OET rel. Sept. 12, 2019) ("*MOS Reconsideration Order*").

⁶ Letter from Jennifer A. Manner, Hughes, to Marlene H. Dortch, FCC, WC Docket No. 10-90 (filed Sept. 25, 2019).

In affirming its ability to achieve a MOS 4 under the revised testing framework in its September 25, 2019 letter and the Withdrawal, Hughes took appropriate account of the ITU planning tool. As the *MOS Reconsideration Order* observes, that planning tool is merely a prediction, and is not based on actual subjective tests conducted using current satellite networks under the revised parameters established by Commission staff.⁷ In the Withdrawal, Hughes discussed how the MOS testing framework in the *Performance Metrics Order* “contained provisions that added uncertainty to the execution of tests and statistical interpretation of test results, which the *MOS Reconsideration Order* addresses.”⁸ Moreover, as Hughes has noted, “[r]eal-world experience also shows that satellite voice customers are satisfied with their voice service.”⁹

Please direct any questions regarding this filing to the undersigned.

Sincerely,

/s/

Jennifer A. Manner
Senior Vice President, Regulatory Affairs

cc: Suzanne Yelen
Alexander Minard

⁷ See *MOS Reconsideration Order* at ¶ 15.

⁸ Withdrawal at 2.

⁹ Hughes Reply at 10-11.